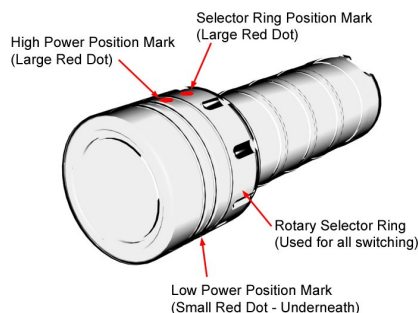


**Important: Please read instructions before use**

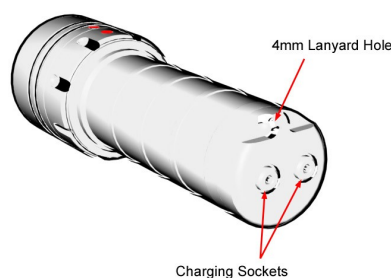
## Operation

The SOLUS SH-1250 is a handheld dive light designed to deliver extremely high performance in a compact package. The SH-1250 has a number of functions, which are accessed by the rotating selector ring (*figure 1*)

For simplicity we have broken these down into two levels (Basic and Advanced Functions).



*fig 1*



*fig 2*

## Basic functions

The selector ring can rotate through 360° around the main body of the light. Within one rotation there are four detent positions at 90° spacings. Two of these positions are marked with a red dot on the head of the light, one large and one small. (*fig 1*)

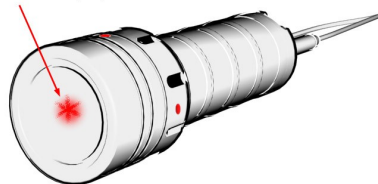
- |            |  |
|------------|--|
| FULL POWER | When the red dot on the selector ring is aligned with the large red dot on the head, the light will switch on at full power (100%)<br>Burn time on this setting is 75 minutes.                                     |
| LOW POWER  | When the red dot on the selector ring is aligned with the small red dot on the head the light will switch on in low power mode (30%)<br>Burn time on this setting is 240 minutes.                                  |
| OFF        | Rotating the selector ring to either of the unmarked positions will switch the light off. (There will be a short delay before the light turns off)   |
| BATTERY    | Turn the selector ring to the FULL POWER position for a minimum of 10 seconds and then turn off. The status indicator LED ( <i>fig 3</i> ) in the centre of the main LED array will indicate the battery condition |

## Advanced functions

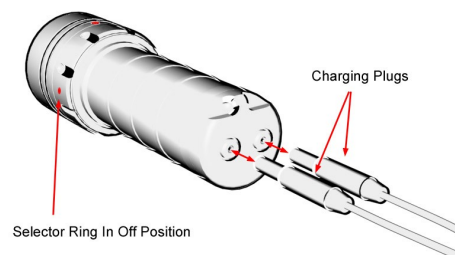
While the basic functions are enough for many divers, the SH-1250 has several advanced functions that provide added usability and safety features.

- 60% POWER** When set to full power (100%) you can step the light level down to 60% by quickly rotating the selector ring towards off and back to the large dot. Burn time on this setting is approximately 120 minutes. Repeating this will step the light level back to 100%
- 10% POWER** When set to low power (30%) you can step the light level down to 10% by quickly rotating the selector ring towards off and back to the small dot. Burn time on this setting is approximately 12 hours. Repeating this will step the light level back to 30%
- STROBE** The STROBE mode provides a means to mark your position or draw attention to yourself. To access the STROBE mode, rotate the selector ring back and forth over the low power position eight times. When the light begins to flash, leave the selector ring in the low power position. Burn time on this setting is approximately 24 hours. The STROBE may continue to flash for a few seconds after the selector ring is turned to the OFF position.
- SOS BEACON** The SOS BEACON flashes out an internationally recognised Morse emergency signal. To access the SOS BEACON mode, rotate the selector ring back and forth over the high power position eight times. When the light begins to flash, leave the selector ring in the high power position. Please use the SOS BEACON function responsibly and keep in mind that at night the beacon can be seen from many kilometres away. Burn time on this setting is approximately 24 hours. The SOS BEACON may continue to flash for a few seconds after the selector ring is turned to the OFF position.
- TRAVEL LOCK** Engage the TRAVEL LOCK to prevent accidental operation during transport. To access the TRAVEL LOCK rotate the selector ring continuously around the light body for five full rotations in either direction and leave in the off position. The status indicator (*fig 3*) will cycle through a repeating green-amber-red cycle for up to 12 seconds and then stop. In this mode, when the selector ring is switched to either on position the main LEDs will not light (the status LED will repeat the TRAVEL LOCK code). To disengage the TRAVEL LOCK rotate the selector ring continuously around the light body for five full rotations in either direction and leave in the on position. The mains LEDs will light.

Status Indicator LED  
(In Centre of Viewport)



*fig 3*



*fig 4*

## Thermal Protection

To protect the electronics and LED array the SH-1250 monitors the internal temperature of the light and will shut the light down if this temperature rises too high. When this happens the main LED array will flash 3 times and turn off. The light can be restarted again when the temperature drops.

This will not occur while diving as heat from the light is quickly dissipated into the surrounding water. In air the SH-1250 can be run up to 5 minutes on full power before the light will automatically shut down. On the low power setting (30%) the light will run for extended periods out of water with no problems.

## Battery Low Lock

To prevent battery damage by over discharge the SH-1250 will automatically turn the LED array off when the battery capacity falls to an unacceptable level. If the selector ring is turned to either of the ON positions in this state, the status indicator will flash Red.

The Battery Low Lock will be reset next time the light is charged.

## Charging instructions

To charge your SH-1250

1. Rinse the SH-1250 in fresh water, dry and blow water out of the two charging sockets at the back of the light. (*fig 4*) Failure to clear water out of these sockets may result in damage to the plugs or erratic charging.
2. Ensure the selector ring is in one of the off positions (red dot on the selector ring does not align with the red dots on the head)
3. Insert the charging plugs into the charging sockets. The red or black plugs may go into either socket. (The plugs are shrouded for safety – the shrouds will retract as the plugs are pushed into the sockets)
4. Plug the power supply into the mains. The power supply is a switched mode wall plug, which can be used on any mains supply voltage.
5. The light will detect the supply of electricity and switch to charge mode. The Status Indicator LED will light red to indicate it is charging at full rate.
6. During the charge cycle the status indicator will turn orange to indicate that it is topping off the charge. When the status indicator turns green the battery has been fully charged and is ready for use.
7. Unplug the power supply from the mains then unplug the charging plugs from the back of the light.

| Status LED      | Meaning                                     | Action                              |
|-----------------|---|-------------------------------------|
| Red             | Battery discharged                          | Charge before use                   |
| Amber           | Battery capacity partially discharged       | Use/charge as required              |
| Green           | Battery capacity full / near full           | Use as required                     |
| Green-Amber-Red | Light in Travel Lock mode                   | Disengage Travel Lock               |
| Flashing Red    | Light in Battery Low Lock mode              | Charge at next opportunity          |
| Green-Red       | Charging interrupted / abnormal termination | Check connections and mains supply. |
|                 |   |                                     |

(Table 1)

## Leading Particulars

Light Output Comparable to 150 Watt Halogen / 35 Watt HID Lamp

75 minutes burntime at 100% power  
120 minutes burntime at 60% power  
240 minutes burntime at 30% power  
12 Hours burntime at 10% power  
24 Hours in STROBE mode  
24 Hours in SOS BEACON mode

*(Burntimes are approximate – based on fully charged battery)*

High Intensity Solid State Light Engine  
Extremely Robust Design  
Features SOS and STROBE beacon modes  
Military Specification Anodised Aluminium Housings  
>33,000 Hr Lamp Life  
6500°K Colour Temperature - Ideal for Photography / Videography  
Excellent Penetration  
7.5 ° Beam angle in water / 11 degree beam angle in air  
External Proximity Switching - No possibility of leakage through switch  
Through Case Charging - Reduced possibility of leakage due to seal damage  
Intelligent Universal Charger included as standard  
Features Battery Protection & Thermal Protection systems

|                  |  |
|------------------|--|
| Dimensions:      | 63mm diameter X 180mm length (2 ½" X 7") |
| Weight Dry:      | 660 grams (1.45 pounds)                  |
| Weight in water: | 550 grams (1.20 pounds)                  |

## Safety Information

DO NOT STARE DIRECTLY INTO THE LIGHT WHEN MAIN LEDS ARE ON  
(Staring into the light may cause permanent eye damage)  
ONLY OPERATE THE SOS MODE IN EMERGENCY SITUATIONS  
(SSP accept no responsibility for inadvertent emergency service callouts)  
DO NOT OPERATE THE POWER SUPPLY/CHARGER IN A WET ENVIRONMENT  
(There is a very real risk of serious injury or death due to electrocution)  
DO NOT LEAVE UNATTENDED WHILE CHARGING

*(SOLUS Submersible Products Ltd accept no responsibility for injuries or costs arising from the misuse of this product)*